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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,823	01/25/2001	Harlan Sexton	50277-0459	2214

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Stephen C. Carlson
DITTHAVONG & CARLSON, P.C.
Suite A
10507 Braddock Road
Fairfax, VA 22032

EXAMINER

NGUYEN, LOAN B

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 12/04/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/768,823

Applicant(s)

SEXTON ET AL.

Examiner

Loan B Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Claims 1-18 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 6-10, 13, and 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang et al. (5870753) (hereinafter Chang et al.).

1. As per claim 1, Chang et al. teaches method for accessing an instance of a recreatable object in a shorter-duration memory based on a reference located in a longer-duration memory, wherein the shorter-duration memory is associated with a call, the method comprising the steps of:

locating, within the shorter-duration memory, a context structure associated with the call
(e.g. col. 4 line 47-55);

locating an XREF pointers array based on data cached within the context structure
(e.g. col. 5 line 5-12);

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determining whether the XREF pointers array includes a pointer associated with said reference (e.g. col. 5 line 25-30); and

if the XREF pointers array includes a pointer associated with said reference, then following said pointer to locate said instance within said shorter-duration memory (e.g. col. 5 line 40-50).

2. As per claims 10 is rejected for similar reasons as stated above.

3. As per claim 4, Chang et al. teaches wherein:

the XREF pointers array does not include a pointer associated with said reference (e.g. col. 8 line 1-4); and

the method further comprises the steps of creating said instance by activating said recreatable object (e.g. col. 8 line 36-44); and

storing a pointer to said instance in said XREF pointers array (e.g. col. 9 line 4-16).

4. As per claims 9, 13, and 18 are rejected for similar reasons as stated above.

5. As per claim 6, Chang et al. teaches a method for accessing an instance of a recreatable object in shorter-duration memory based on a reference located in a longer-duration memory, wherein the shorter-duration memory is associated with a call, the method comprising the steps of:

when a class is activated, generating, within said shorter-duration memory, a class object associated with the class (e.g. col. 13 line 8-16);

storing, within said class object, data for locating instances of recreatable objects associated with said class (e.g. col. 5 line 49-59);

to dereference said reference, performing the steps of determining that said reference is associated with said class (e.g. col. 12 line 6-17); and

using said data within said class object to locate said instance of said recreatable object (e.g. col. 13 line 5-9).

6. As per claim 15 is rejected for similar reasons as stated above.
7. As per claim 7, Chang et al. teaches wherein the step of storing, within said class object, data for locating instances is performed by storing, within said class object, a pointer to an XREF pointers array (e.g. col. 12 line 53-59).
8. As per claim 16 is rejected for similar reasons as stated above.
9. As per claim 8, Chang et al. teaches wherein the step of using said data within object to locate said instance includes the steps of:

determining whether the XREF pointers array includes a pointer associated with said reference (e.g. col. 5 line 25-30);

if the XREF pointers array includes a pointer associated with said reference, then following said pointer to locate said instance within said shorter-duration memory (e.g. col. 5 line 40-50).
10. As per claim 17 is rejected for similar reasons as stated above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 3, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (5870753) (hereinafter Chang et al.) in view of Bennett (6014733) (hereinafter Bennett).

5. As per claim 2, Chang et al. does not specifically teach wherein the step of locating an XREF pointers array based on data cached within the context structure.

Bennet teaches wherein the step of locating an XREF pointers array based on data cached within the context structure comprises the steps of:

determining a hash code associated with a memory page in which the XREF is located (e.g. col. 8 line 43-52);

using at least a portion of the hash code as an index to locate an array entry within an array stored within the context structure (e.g. col. 4 line 4-14); and

if said array entry contains a pointer, then following said pointer stored in said array entry to locate said XREF pointers array (e.g. col. 6 line 50-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Chang et al. with Bennett because it would accomplish to compute a hash

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value that are stored in the mapping table. The server invokes the remote method invocation calls using hash value indexes and a pointer to locate a reference object.

6. As per claim 11 is rejected for similar reasons as stated above.

7. As per claim 3, Chang et al. does not specifically teach wherein the array is a power-of-two array and the portion of said hash code that is used as said index includes a particular number of bits of said hash code.

Bennett teaches wherein:

the array is a power-of-two array (e.g. col. 7 line 18-50); and

the portion of said hash code that is used as said index includes a particular number of bits of said hash code (e.g. col. 4 line 38-53 and col. 7 line 63-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Chang et al. with Bennett because it would accomplish computing a hash value and storing hash value as an index in the hash table. In addition, the corresponding bits of the bitmap matrix are power of two for the table indexed by 8-bits, 16-bits, etc. which will be the page offset table.

8. As per claim 12 is rejected for similar reasons as stated above.

9. Claims 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (5870753) (hereinafter Chang et al.). in view of Jones et al. (6629154) (hereinafter Jones et al.).

10. As per claim 5, Chang et al. does not specifically teach wherein if said array entry does not contain a pointer, then creating said instance by activating said recreatable object; and storing a pointer to said instance in said array entry.

Jones teaches wherein:

if said array entry does not contain a pointer, then creating said instance by activating said recreatable object (e.g. col. 10 line 55-67); and

storing a pointer to said instance in said array entry (e.g. col. 11 line 6-14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Chang et al. with Jones et al. because it would accomplish by upon the receipt of RMI call, the server will identify the call and check the reference mapping table that contains a hash value and a pointer; if a pair does not exist then creates a remote object and stores in the mapping table.

11. As per claim 14 is rejected for similar reasons as stated above.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Loan B. Nguyen whose telephone number is (703) 305-0358.

The examiner can normally be reached on 7:00 AM - 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Loan B. Nguyen
December 1, 2003

 **JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**